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actly of the bigness of the originals. If any of them are new to you, and are worth your notice, it will give me much pleasure. . . yr^r &c.,

(Signed) “ ‘JAMES SIMON.

“ ‘ P. S.—No. 1 was found in the lands of Mr. James Commins, about 4 foot deep, in making a ditch near a place called Key's hole, in the west part of the county of Clare.

“ ‘ I have drawn these, that the Society may have a conception of them, over leafe.’ ”

The Rev. SAMUEL HAUGHTON read the following paper :—

ON THE DYNAMICAL COEFFICIENTS OF ELASTICITY OF STEEL, IRON, BRASS,
OAK, AND TEAK.

ALL works on mechanics, with which I am acquainted, in solving the problem of the collision of bodies, assume that the momentum is preserved during the shock, and the *vis viva* lost, in such manner as to retain the constancy of the Coefficient of Elasticity, which is defined to be the ratio which the velocity of separation of two bodies after the shock bears to the velocity of approach before the shock. Some time ago, in making some calculations respecting armour-plated frigates, I found it necessary to use the Dynamical Coefficients of Elasticity of steel, iron, oak, and other substances, and made some experiments for the purpose of determining them. These experiments were made at the Kingstown Railway works, and consisted in dropping spherical balls ($2\frac{1}{4}$ in. diam.) of steel, iron, and brass upon levelled surfaces of steel, iron, oak, teak, &c., and measuring the height of the rebound. I hope at some future time to lay the results of these experiments in detail before the Academy ; but at present I shall content myself with publishing the following Table, which contains the means of many experiments.

From this Table the remarkable fact appears, that the Dynamical Coefficient of Elasticity is not constant, but diminishes, according to some unknown law, as the velocity of the collision increases.

TABLE of Values of ϵ^2 , the square of the Dynamical Coefficient of Elasticity, or of the ratio of the Velocity of Separation to the Velocity of Approach, of different bodies in collision.

Substances.	Velocity of Approach.	Square of Dynamical Coefficient of Elasticity = ϵ^2
Steel on Steel, {	16 ft. per sec.	0.5208
	24 ,,	0.4462
Steel on Iron and Iron on Steel,* {	16 ft. per sec.	0.2952
	24 ,,	0.2685
	32 ,,	0.2588
	40 ,,	0.2245
Steel on Oak, fibres horizontal, . {	16 ,,	0.1172
	24 ,,	0.1157
	32 ,,	0.1041
	38.4 ,,	0.0933
Steel on Oak, fibres vertical, . . {	32 ft. per sec.	0.0931
	38.4 ,,	0.0887
Steel on Teak, fibres horizontal, . {	16 ft. per sec.	0.1719
	24 ,,	0.1666
	32 ,,	0.1562
	40 ,,	0.1379
Brass on Steel, {	16 ft. per sec.	0.1380
	24 ,,	0.1134

MONDAY, FEBRUARY 24, 1862.

The VERY REV. CHARLES GRAVES, D. D., President, in the Chair.

THE Rev. Dr. Reeves exhibited and described drawings of some ancient sepulchral inscriptions found in the province of Ulster.

The episcopal seal of the Right Rev. Dr. William Fitzgerald, late Lord Bishop of Cork, Cloyne, and Ross, was presented to the Museum by his Lordship.

Thanks were voted to the donors.

* There was an absolute agreement in the results obtained by dropping steel on soft iron, and, *vice versa*, soft iron on steel.